

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov www.ct.gov/csc

September 1, 2017

TO:

Parties and Intervenors

FROM:

Melanie Bachman, Executive Director

RE:

PETITION NO. 1313 – DWW Solar II, LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction, maintenance and operation of a 26.4 megawatt AC solar photovoltaic electric generating facility on approximately 289 acres comprised of 5 separate and abutting privately-owned parcels located generally west of Hopmeadow Street (US 202/CT 10), north and south of Hoskins Road, and north and east of County Road and associated electrical interconnection to Eversource Energy's North Simsbury Substation west of Hopmeadow Street in Simsbury, Connecticut.

Comments have been received from the Department of Transportation, dated August 28, 2017. A copy of the comments is attached for your review.

MB/RDM/bm

c: Council Members





STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION



2800 BERLIN TURNPIKE, P.O. BOX 317546 NEWINGTON, CONNECTICUT 06131-7546

Phone:

Ms. Melanie Bachman Acting Executive Director Connecticut Siting Council Ten Franklin Square New Britain, CT 06051

August 28, 2017



Dear Ms. Bachman:

Subject: Petition No. 1313

20.0 Megawatt AC Solar Facility

Hopmeadow St., Hoskins Rd., and County Road

Town of Simsbury

The Department of Transportation has reviewed the above-mentioned Petition and offers the following comment.

The proposed project may result in an associated work within the state right of way including but not limited to overhead or underground utility work from Route 10 to the project site. Therefore, the 26.4 Megawatt AC Solar project may be required to obtain Highway Encroachment Permit in conjunction with the Connecticut General Statues prior to performing any work within the right of way. The District 4 Permit Office will need review three complete sets of construction plans which show all work within the State highway right of way, all site work, any required easements and standard details for highway construction prior to issuing the encroachment permit.

The District 4 Permit Office will determine the bond amount, insurance coverage, maintenance and protection of traffic, inspection, roadway restoration and pavement restoration requirements. Please see attached D.O.T. Screening Check List.

Should you have any further questions, please contact, Ms. Latoya Smith, Utility Engineer (Utilities), at (860) 594-2533.

Very truly yours,

Sohrab Afrazi

Transportation Principal Engineer

Bureau of Engineering and Construction



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ton Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 H-Moil: sking.council@ct.gov www.cl.gov/oso

Screening Checklist Connecticut Department of Transportation Potential Transportation Infrastructure Impacts Connecticut Siting Council Petition # 1313

Location: Simsbury

| 1. | Is the proposed facility abutting the right-of-way of a State maintained highway? | |
|----|--|--|
| | No Yes - Specify the location and show location on a detail site plan. | |
| 2. | Is access for construction and maintenance of the proposed facility needed directly from a State maintained highway. | |
| | No Yes – Identify specify needs and access location. | |
| 3. | Is the proposed facility within or abutting a State owned Railroad Right-of Way? | |
| | No Yes – Please provide an area and site plan. | |
| 4. | Is the proposed facility within a two mile radius of any lands classified as preserved scenic land in accordance with CGS Section 13a-85a, "Acquisition of land adjacent to state highways for preservation and enhancement of scenic beauty and development of rest and recreation areas", or any designated scenic road in accordance with CGS Section 13b-31c, "Designation of scenic roads"? | |
| | X No Yes | |

Č9C

DULK TORREST STEEL STEEL



2500-Ft Property Boundary Radius

Tobacco Valley Solar Simsbury, Connecticut

consideration for lack of one or more of the listed characteristics. Other sites investigated included but were not limited to:

- > Litchfield 158-acre site abandoned due to wetland constraints
- Griswold 25-acre site abandoned due to access limitations and wetlands
- Killingly 158-acre site abandoned due to rare species and potential soil contamination issues.

Once the Project Site was selected, DWW Solar embarked upon a detailed due diligence analysis of the feasibility of developing a solar project on this property. Ultimately the Project Site was determined to be feasible for development and DWW Solar submitted an application to the CT DEEP, Eversource, Unitil, and National Grid for consideration under the 2016 Tri-State Clean Energy RFP. DWW Solar was notified in October 2016 that the Simsbury Project had been selected as a finalist under the RFP review process.

3.4 Property Description

The Project Site consists of five separate parcels of land totaling approximately 289 acres off Hopmeadow Street (US 202/CT 10), Hoskins Road and County Road in Simsbury. Refer to Figure: Site Location Map provided at Exhibit B.

| Parcel ID | Acreage ¹ | Zoning Designation |
|-----------------|----------------------|--------------------|
| G03-403-032 | 138 | R-40 |
| G03-403-012 | 30 | R-40 |
| G03-403-026-32H | 54 | I-1 |
| G03-403-014 | 14 | I-1 |
| H05-103-024 | 53 | R-40 |

The Project Site contains areas of agricultural fields, woodland and wetland areas. Unimproved dirt farm roads interconnect the fields and provide access from public roadways. The Project Site is crossed by the Eversource 1256 Line 115 kilovolt (kV) transmission line right of way (ROW) and two municipal sewer easements.

The Project Site is bounded on the west by residential subdivisions and the Squadron Line School, on the north by open space, on the east by residential land uses, open space and the Eversource substation, and on the south by open space.

3.5 Project Description

The Project includes the construction of solar photovoltaic arrays across the five parcels. Consistent with the terms of the Power Purchase Agreement, the proposed Project is anticipated to have a 25-year operational life. The Project will connect into the Eversource North Simsbury Substation.

Acreage according to VHB property boundary survey.

The solar panels will be mounted on fixed metal framework or "racking". The racks will be arranged in rows facing due south and will be supported on pile foundations arranged in rows spaced approximately 13 feet apart to enable access by pickup truck or ATV. The panels are fixed at a tilt of approximately 25 percent and will be approximately 3 feet above grade at the low end and approximately 10 feet above grade at the highest point. The photovoltaic panels are composed of crystalline silica cells supported in anodized aluminum frames. The panels are designed to have low irradiance (reflectance), and are approximately 97 percent efficient, meaning that very little light is reflected off the surface. The proposed array system is designed to absorb energy directly from the sun and should not be confused with the reflectorconcentrator type systems that have been constructed in the western United States. The panels will be connected with direct buried cross-linked polyethylene (XLPE) cable which connect the panel arrays to electrical equipment pads. Fourteen concrete equipment pads spaced throughout the Project footprint will contain transformers, inverters and electrical panels. This equipment is anticipated to have a height above adjacent grade of approximately 10 feet. The solar array will connect to the Eversource North Simsbury Substation described above via a buried XLPE electrical cable. All cabling for the Project will be buried underground.

The facility will be surrounded by a 20-foot-wide gravel perimeter roadway for safety and a 7-foot-high chain link fence for security. The chain-link fence is required to be posted with safety signage providing the warning that high voltage equipment is stored inside the fence. The National Electric Safety Code (NESC) dictates the height of the fence and the signage. The NESC also dictates the distance between the fence and electrified equipment to minimize arcing, as well as grounding requirements for the fence itself for the safety of those potentially contacting the fence. The security fence is not an electric fence. Outside the fence, an approximately 100-foot-wide zone around the east, west and south sides will be cleared of vegetation and managed as meadow for the lifetime of the facility operation.

Generally, the Project will conform to existing surface grades. Within the fence line, where steep slopes are present, grading will be required to achieve maximum slopes of 15 percent. Limited grading will be necessary around the Project perimeter to meet existing grades. Proposed array foundations will be driven piles, either steel H-piles or pre-drilled concrete. 20 foot by 20 foot pads concrete pads will be cast in place. Footings for the pads will extend 4 to 5 feet below grade. Direct buried XPLE cable will be trenched in approximately 3 to 4 feet below grade.

Operational phase access to the Site will be provided off Hoskins Road and County Road. The 20-foot-wide gravel perimeter roadway will connect to the public roadway at these locations. A gate will be installed at the County Road entrance to discourage driving along the access roads by unauthorized individuals. Signage identifying the facility will be provided at each of these locations and will include contact information for DWW personnel and/or a designated operator in charge of managing the facility. These signs will be designed with consideration of the extensive signage guidance provided in the Town of Simsbury Zoning Regulations.